Electronic Version
Stylesheet Version v1.1.1

Claims

[c1] 1.A method for determining whether an object of a particular type has an ambiguous location value associated with it in a responsive environment comprising:
sensing an object presence in a field of a sensor;
determining the number of spaces that the sensor covers for that object type; and
if the number of spaces covered is greater than 1, setting the ambiguous location value for the object in each of the spaces covered by the sensor.

[c2] 2. The method of claim 1, wherein,
the ambiguous location value is set to a proportional certainty of 1 divided by the number of spaces covered by the sensor.

[c3] 3. The method of claim 1, further comprising:
if the number of spaces covered is greater than 1, determining whether the object is a valid type for the space; and
only if the object is valid , setting the ambiguous location value for the object in each of the spaces covered by the sensor.

[c4] 4. The method of claim 1, further comprising:
if the number of spaces that the sensor covers is zero, then providing a configuration error.

[c5] 5. The method of claim 1, further comprising:
if the number of spaces covered is exactly 1, removing the ambiguous location value.

[c6] 6. The method of claim 1, wherein,
the determination of the number of spaces that the sensor covers is made using a sensor property data field.

[c7] 7. The method of claim 6, wherein,
the sensor property data field comprises a deployed for field value of boundary.

[c8] 8. A method for determining whether an ambiguous location value of a first object can be further resolved comprising:
sensing a second object presence in a field of a sensor;
determining whether the location of the second object is known unambiguously,
if the location of the second object is known unambiguously, determining whether the second object is associated with the first object; and
further resolving the ambiguous location of the first object using the location of the second object.

[c9] 9. The method of claim 8, further comprising,
determining whether the second object is uniquely associated with the first object.

[c10] 10. The method of claim 9, further comprising,
if the second object is uniquely associated with the first object, unambiguously resolving the location of the first object by using the location of the second object.

[c11] 11.The method of claim 10, wherein,
the second object is located in a child location of a parent location,
further comprising,
if the second object is uniquely associated with the first object, unambiguously resolving the location of the first object to be the parent location.

[c12] 12. The method of claim 9, further comprising,
if the second object is not uniquely associated with the first object, determining an increase in location probability for the first object and further resolving location of the first object by using the location of the second object and the increase in location probability.

[c13] 13. The method of claim 12, wherein,
an artificial intelligence system is used to determine the increase in location probability for the first object.

[c14] 14. The method of claim 13, wherein,
the artificial intelligence system is a baysian network.

[c15] 15. The method of claim 8, further comprising,
determining whether the second object is strongly associated with the first object.

[c16] 16. The method of claim 15, further comprising,
if the second object is strongly associated with the first object, ambiguously resolving the location of the first object to a very likely probability by using the location of the second object.